



DEUTSCHE BÖRSE
CASH MARKET

T7 Release 11.1

Final Release Notes

for the Trading Venues Xetra and Börse Frankfurt

Version 1.1

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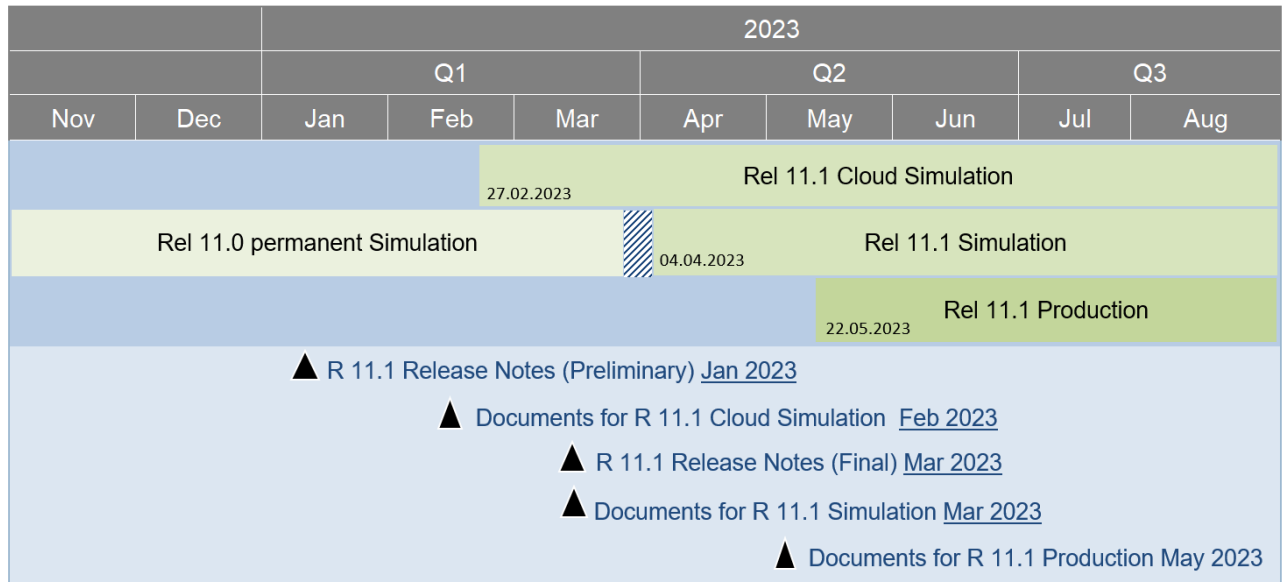
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1. Overview of T7 Release 11.1

Deutsche Börse AG is planning to launch T7 Release 11.1 on 22 May 2023.

The following diagram gives an overview of the introduction schedule:



Deutsche Börse AG provides a dedicated release simulation environment to give trading participants the opportunity to perform comprehensive testing of their trading applications independent from the T7 production environment.

The simulation period for T7 Release 11.1 is planned to start on 04 April 2023.

In addition, and prior to the T7 release simulation, Deutsche Börse AG offers a T7 Release 11.1 Cloud Simulation to allow trading participants and Independent Software Vendors (ISVs) to test the T7 Release 11.1 ETI, FIX LF interface, as well as RDI, MDI, EMDI and EOBI interface changes. In the Cloud Simulation, participants can initiate predefined market scenarios and test specific strategies more easily than in a shared environment. The Cloud Simulation is available around the clock for a fixed price per hour and started on 27 February 2023.

For more information on the T7 Cloud Simulation, please refer to <http://www.xetra.com/xetra-en/technology/t7/cloud-simulation>.

1.1 New Features and Enhancements Overview

The following new main features and enhancements will be introduced with T7 Release 11.1:

	Relevant for	
	T7 Xetra	T7 Börse Frankfurt
Password Encryption for ETI	X	X
TES LIS for Börse Frankfurt (XFRA) Please note: TES LIS is already available for Xetra.		X
Enhancement to the Sold-Out Procedure in the <i>Continuous Auction with Issuer</i> trading model		X
Initial setup of Pre-Trade Risk Limits effective only on next business day	X	

1.2 Note on Interfaces

T7 Release 11.1 will provide backwards compatibility for the T7 ETI/FIX LF interface version 11.0, i.e. participants who do not want to use the new functionality will still be able to connect to T7 with the interface layout version 11.0 even after the production launch of T7 Release 11.1. Please note that backwards compatibility is and always was defined differently for ETI and FIX LF, see the *T7 Enhanced Trading Interface (ETI) Manual* and the *T7 FIX Gateway Manual*.

Public market and reference data interfaces, including EOBI, EMDI, MDI, RDI/RDF, as well as reports and data files, will not provide backwards compatibility.

1.3 Further Reading

The existing documents have been or will be revised for T7 Release 11.1. The following table provides an overview of the schedule for the publication:

T7 Release 11.1	Derivatives Markets	Cash Markets	Combined	2023				
				Jan	Feb	Mar	Apr	May
T7 Release 11.1 - Release Notes	x	x		◆		●		
T7 Functional Reference			x			●		
T7 Functional and Interface Overview			x			●		
T7 Participant Simulation Guide			x			●		
T7 Cross System Traceability			x			●		
T7 Incident Handling Guide			x			●		
T7 Participant and User Maintenance Manual	x	x				●		
Contract Notes Description		x						●
T7 Known Limitations			x			■		●
T7 Trader, Admin and Clearer GUI – User Manual	x	x				■		●
T7 Trader, Admin and Clearer GUI – Installation Manual			x			●		
T7 Enhanced Trading Interface – Manual incl. XSD, XML Representation and Layouts			x	◆		■		●
T7 FIX LF – Manual incl. XML Representation and FIX Repository			x	◆		■		●
T7 Market, - Enhanced Order Book- and Reference Data Interfaces Manual incl. Fast Message Template, Repository & FIXML Schema Files			x	◆		■		●
T7 Extended Market Data Services – Manual incl. Fast Message Template and Underlying Ticker Data			x			■		●
Cash Market Instrument Reference Data Guide		x				●		
T7 XML Report Reference Manual			x			■		●
Common Report and Upload Engine User Guide			x			●		
Exchange Rules & Regulations		x						●
Market Models		x						●

◆ Cloud Simulation / Preliminary Version ■ Simulation Version ● Production / Final Version

Please note that the outlined schedule is subject to change.

The documents will be available on the Xetra website www.xetra.com under the path:

> Technology > T7 Trading Architecture > System Documentation > Release 11.1

1.4 Contacts

If you have any questions or require further information, please contact your Global Key Account Manager Trading. Alternatively, please contact your Technical Key Account Manager using your VIP number or via e-mail to: cts@deutsche-boerse.com.

1.5 Definitions and Abbreviations

Term/Abbreviation	Description
Börse Frankfurt	Trading venue of FWB, where equities, bonds, ETFs, ETCs, ETNs and funds are traded including Börse Frankfurt Zertifikate marketplace
DBAG	Deutsche Börse AG
EMDI	T7 Enhanced price level netted Market Data Interface
EOBI	T7 Enhanced Order Book Market Data Interface
ETI	T7 Enhanced Trading Interface
FIX LF	Financial Information eXchange (protocol) Low Frequency interface
FWB	Frankfurter Wertpapierbörse
GUI	Graphical User Interface
HF	High Frequency
LF	Low Frequency
LIS	Large in Scale; TES type
MDI	T7 netted price level aggregated Market Data Interface
PTRL	Pre-Trade Risk Limits
RDF	T7 Reference Data File
RDI	T7 Reference Data Interface
T7	The trading architecture developed by Deutsche Börse Group
TES	T7 Entry Service
UTC	Coordinated Universal Time
XETR	Market Identifier Code (MIC) of trading venue T7 Xetra
XFRA	Market Identifier Code (MIC) of trading venue T7 Börse Frankfurt including Börse Frankfurt Zertifikate marketplace

2. Password Encryption for ETI, especially for ETI HF

Xetra will introduce several changes regarding data transmission via the T7 trading interfaces in order to meet regulatory requirements as information transmitted via public communication networks is subject to the risk of unauthorised interception, manipulation, or misuse, and as credentials have to be encrypted always (see also circular 045/22 of 06 September 2022).

The regulation on Critical Infrastructures (KRITIS) enforced by the Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik – BSI) specifies that providers of critical infrastructure such as Deutsche Börse need to adhere to the requirements, which include the encryption of data during transfer via public networks respectively the encryption of credentials in all networks.

In the context of these changes, Xetra will provide with T7 Release 11.1 an additional login option for both sessions and users for the T7 Enhanced Trading Interface (ETI) to provide the possibility to encrypt the credentials for HF sessions where the payload is not encrypted as it is for LF sessions. It will be password padded by the current UTC timestamp, encrypted with Deutsche Börse's public RSA key, and base64 encoded. The public key will be published in the Member Section of the Xetra Website.

The upcoming *Network Access Guide* and Xetra ETI documentation for T7 Release 11.1 will provide more details.

The new login option with password encryption will become mandatory at a later point in time. The schedule has been published in Xetra Circular 002/23 on 16 January 2023.

3. TES LIS for trading venue Börse Frankfurt (XFRA)

After T7 Release 11.1, the TES type LIS will become available also for the trading venue Börse Frankfurt (XFRA). TES LIS is not available for Börse Frankfurt Zertifikate instruments.

The TES type LIS (Large in Scale) supports bilateral, off-book but on exchange trading of cash instruments. A participant can enter trades that they previously arranged with each other into the T7 trading system.

On entry, several validations are performed, e.g. price and quantity validations. The deferred TES trade publication is performed according to MiFID/MiFIR requirements.

For more information about the TES type LIS, please consult the *T7 Functional Reference* document about TES types for cash markets in chapter 8: Off-Book Trading.

4. Enhancement to the Sold-Out Procedure in the *Continuous Auction with Issuer* trading model

With T7 Release 11.1, the Sold-Out procedure in the *Continuous Auction with Issuer* trading model will be enhanced. Once a Sold-Out is declared for an instrument, the next auction call phase will not be triggered if there are only buy market or limit buy orders in the book and no standard or matching quote. Please note that stop orders might be triggered due to quotes, which will still result in a triggering of an auction call phase. However, after all stop orders are triggered, no further auction call phase will be triggered. The Issuer Specific Information is only sent once an instrument state change occurs; therefore it will not be sent in the above scenario since the phase is not changed.

In case Sold-Out is revoked, processing as of today resumes.

5. Pre-Trade Risk Limits: Initial setup effective only on next business day

With T7 Release 11.1, the Pre-Trade Risk Limits (PTRL) functionality will be amended such that the initial setup of limits will only be effective on the next business day. All other PTRL configurations and features remain unchanged.

The change will become effective directly on the release day.

5.1 Functional Description

The PTRL functionality calculates in real-time how much of a given PTRL has already been consumed by incoming transactions and executions throughout the trading day.

Currently, all intraday changes to any PTRL definition become effective immediately. Hence, setting the PTRL initially from no limit to a defined limit value, becomes directly effective on the same day where it is changed. The same for intraday amendments and deactivations.

With Release 11.1, the functionality will be restricted such that setting the PTRL limit from no limit to a defined limit value will only become effective for the next trading day. This means that setting up an initial limit to a product cannot be done on the same business day where this limit should be effective but must be done on the previous day.

If limits are already active for the current business day, they can still be changed intraday, and the changes will be effective immediately. This will also include a change to "0" or a total deletion of the PTRL. However, if at the end of the day, no PTRL is set (i.e., no PTRL record exists), then the next day, no PTRL will be effective and thus no PTRL calculation will take place.

5.2 Impacts on Interfaces

The following chapter outlines the changes to interfaces and GUIs to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the interface manuals and to the *Online Help* in the GUIs.

5.2.1 T7 Admin and Clearer GUIs

A new field *ActivationDate* will indicate on which date the limits get activated.

6. Further Changes and Enhancements

With T7 Release 11.1, Xetra will introduce the following additional changes and enhancements.

6.1 T7 Trader GUI: Alert in configurable display location

With T7 Release 11.1, a new attribute *Alert Popup Position* will be introduced to the *Alert Configuration* view of the T7 GUIs, by which the user can choose the display location for alerts. It will be possible to display alerts *DownRight* as before, *Center* or *TopLeft*.

6.2 Modification of XML report TL001 System Transaction Overview

With T7 Release 11.1, the calculation of system transaction fees in the existing XML report TL001 System Transaction Overview will be changed. In the future, the fees will be calculated on the level of the lead participant, covering all members of this lead participant.

For this, the participant fields will be renamed to leadParticipant fields, and the report will be modified in its layout.

6.3 Enhanced structure of XML report TR162 Algo HFT Error

With T7 Release 11.1, the T7 XML report TR162 Algo HFT Error will be enhanced by adding the following existing fields to tr162Rec: transactionIdentifier, user, sessionID, freeText1, freeText2, freeText3, freeText4, typOrig.

6.4 New Best Bid Offer Setting flag

After T7 Release 11.1, a new Best Bid Offer (BBO) Setting flag will be introduced to orders and quotes. The new flag will indicate whether the order or quote set a new strictly best price at the time it was entered respectively modified in a way so that the price-time priority changed, if entered or modified in instrument state *Continuous*.

The new flag will be disseminated in ETI and FIX response messages for order entry and order modification, and in order and quote execution messages. It will be reflected in the *Order* views in the T7 GUIs, and in the T7 order reports, i.e. in TC540 Daily Order Maintenance and in TC550 Open Order Detail.

6.5 Decommissioning of Cash Market Reference Data within the Member Section

In order to reduce complexity and redundancy, Deutsche Börse has decided to decommission the Cash Market Reference Data service (simulation and production) with T7 Release 11.1 on Monday, 22 May 2023, within the Member Section of Deutsche Börse Group, our group-wide client portal.

As of Monday, 22 May 2023, the Cash Market Reference Data will be available via the following sources only:

- Common Report Engine (csv and xml version)
- Reference Data Interface (T7 RDI)
- Instrument Reference Data on the Xetra website (csv version)

For more details, see Xetra Circular 006/23 of 06 February 2023.

7. Change Log

No	Date	Log entry
1.1	14 March 2023	Publication